

A B S T R A C T

A transmitter emits into an intended search space a radar wave having a predetermined frequency pulse-modulated by a trigger pulse of a predetermined width.

5 A receiver receives a reflected wave of the radar wave and outputs a receive signal. A local pulse generator outputs a local pulse signal having the predetermined frequency pulse-modulated by the trigger pulse delayed by the delay unit. A correlation value detector detects a strength correlation value between the receive signal and the local pulse signal.

A delay time changing unit changes the delay time sequentially within a range of a predetermined period representing a generation period of the trigger pulse. A correlation value storage unit stores the strength correlation value detected for each delay time changed. A frequency distribution generator generates a frequency distribution of a stored correlation value against the delay time. A search control unit executes an analyzation for the intended search space based on 10 a generated frequency distribution.

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